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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/025,879 | 12/26/2001 | Hyung Cheol Moon | P-0290 | 9272 |

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| EXAMINER |
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GREY, CHRISTOPHER P

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| ART UNIT | PAPER NUMBER |
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2616

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05/15/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|---------------------------------|-----------------------------------|--|
| Office Action Summary | Application No. 10/025,879 | Applicant(s) MOON, HYUNG CHEOL | |
| | Examiner Christopher P. Grey | Art Unit 2616 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 8-11, 15-19, 22-24, 29-31 and 34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8-11, 15-19, 22-24, 29-31 and 34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 2, 3, 4, 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 21, 22, 23, 24, 26, 27, 28, 29, 32, 33, 35 8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Derryberry (US 6498785) in view of Bark et al. (US 6628956), hereinafter referred to as Bark.

Claim 1, 10, 17, 22 Derryberry discloses transmitting a preliminary signal (Col 8 lines 10-46, fig 4, 402, initial access probe) with a first transmission power from the first station (MS) to a second station (BS).

Derryberry discloses transmitting a first packet data from the first station to the second station with the first transmission power (fig 4 element 410, begins transmission of data). Also, Derry berry discloses power control occurring based on a number of factors, where a possible increase or decrease power command may be applied based on the results of a determination (Col 10 lines 25-55). That increase or decrease may be by 0, where no power adjustment is made based on the determination.

Derryberry discloses increasing the transmission power of the first station to an increased second transmission power if the first packet data transmission is not

Art Unit: 2616

successfully received by the second station (Col 11 lines 6-47, power control continues til entire frame is finished, and element 420 in fig 4, adjust/increase power).

Derryberry discloses transmitting a second packet data from the first station to the second station with the increased second transmission power (Col 11 lines 38-47).

Derryberry does not specifically disclose the increased second transmission power being calculated based on the first transmission power used by the first station in the first packet data transmission to the second station, a controlled amount of the transmission power by the second station, a changed amount of power received at the first station, and a channel compensating value of the second station.

Bark discloses the increased second transmission power being calculated based on the first transmission power used by the first station in the first packet data transmission to the second station (fig 2, 4 and 6, preliminary transmit power, where this value may be adjusted using the open loop control in fig 7), a controlled amount of the transmission power by the second station (Col 8 lines 41-43, tx power from base station), a changed amount of power received at the first station (Col 8 lines 39-44), path loss), and a channel compensating value of the second station (Col 8 lines 50-55, power offset).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to combine the transmit power controller as disclosed in fig 6 of Bark, within the mobile station as disclosed by Derryberry. The motivation for this combination is to adjust the power based on controlled parameters.

Art Unit: 2616

Claim 2, 11 Derryberry discloses ending the packet data transmission when the packet data transmission is successfully received by the second station (Col 11 lines 6-24).

Claim 3, 18, 19, 23, 24 Derryberry discloses transmitting a preamble from the first station to the second station (Col 8 lines 9-46), and receiving a channel occupying signal from the second station (BS) as a response to the preamble (Col 8 lines 47-67, control information and data).

Claim 4 Derryberry discloses ending the packet data transmission process if the channel occupying signal is not received from the second station (power control ends when the transmission of frames is complete , Col 11 lines 6-23 and element 422, in fig 4).

Claim 8, 15 Derry berry does not specifically disclose the transmission power being determined by summing the first transmission power used in the first packet data transmission , the controlled amount of the transmission power by the second station, the changed amount of power received at the first station, and the channel compensating value of the second station.

Bark discloses a power control procedure, wherein a number of different values are used to adjust a power value, where the summation of the first transmission power used in the first packet data transmission , the controlled amount of the transmission power by the second station, the changed amount of power received at the first station, and the channel compensating value of the second station is applicable (Col 8 lines 28-67 and see fig 7).

It would have been obvious to one of the ordinary skill in the art at the time of the invention that the increase or decrease of power as disclosed by Derryberry could be modified so as to conform to an increase or decrease based on variable parameters in order to achieve power control, such as the variables and power control as disclosed by Bark.

Claim 9, 16 Derryberry discloses the first station being a mobile communication station and the second station being a base station (see figs 2 and 3).

Claim 27 Derryberry discloses means for increasing the transmission power calculating the increased transmission power based on a channel compensating value received from the second station (Col 10 lines 29-50, parameter set value).

Claim 28 Derryberry discloses receiving a channel compensating value from the second station (element 408 in fig 4).

Claim 29, 32, 33, 35 Derry berry discloses calculating the increased second transmission power based on the channel compensating value received from the second station (Col 10 lines 29-55).

2. Claims 30, 31, 34 rejected under 35 U.S.C. 103(a) as being unpatentable over Derryberry (US 6498785) in view of Bark et al. (US 6628956) in further view of the prior art disclosed by the applicant.

Claim 30 The combined teachings of Derryberry and Bark do not specifically disclose the preliminary signal comprising a collision detect signal.

The prior art disclosed by the applicant discloses the preliminary signal comprising a collision detect signal (see fig 4 labeled prior art and relevant text).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the transmission of the preamble as disclosed by the combined teachings of Derryberry and Bark, with the addition of a collision detect signal as disclosed by the prior art disclosed by the applicant. The motivation for this modification is for preventing impacts when more than one mobile station requests allocation of the same channel at the same time (paragraph 17)

Claim 31, 34 The combined teachings of Derryberry and Bark do not specifically disclose the channel occupying signal comprising a CD-ACH signal.

The prior art disclosed by the applicant discloses the channel occupying signal comprising a CD-ACH signal (see fig 4 labeled prior art and relevant text).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the transmission of the power control command as disclosed by Derryberry, with the addition of a CD-ACH signal as disclosed by the prior art disclosed by the applicant. The motivation for this modification is to receive a response to the transmitted preamble (paragraph 17).

Response to Arguments

3. Applicant's arguments with respect to claims 1-4, 8-11, 15-19, 22-24, 29-31 and 34 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2616


4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Grey whose telephone number is (571)272-3160. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571)272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christopher Grey
Examiner
Art Unit 2616

C. Grey
May 8, 2007


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